**Predictive Analytics:**

It uses past data for the purpose of predicting future events. Its focus is on the micro rather than the macro, looking at individual interactions with customers, suppliers, employees, etc., rather than at average behaviour or at high-level aggregate patterns.  Looking to the future based on past behaviour to predict: Will a particular customer engage?  Or will a particular supplier deliver on time? Or what is customer retention? Or will a customer buy a product or not?

**Predictive Analytics in Retail industry:**

* In our tech-driven, data rich, world most retail businesses have a grip on data generation, inspection and collection. This large sets of customer data can be applied to enable marketers to predict future behaviour, and based on such predictions, customise the best customer offers, or ways to interact with customers or suppliers. Customer preferences and personalization carries especially great weightage.
* Often, retailers get data from websites, surveys, mobile apps, call-to-actions, point-of-sale systems, kiosks, supply chain systems, social media, in-store cameras and etc. Based on this data we can deep dive into the customers perspective and can work behavioural analytics, people analytics, market analysis and much more.
* We mainly use models which are build by different algorithms and models to search for patterns and correlations in the data using various data mining techniques and methods. This generates probability for new customer interactions.
* We can make use of this technique to develop direct/ indirect marketing campaigns, advertisements, personalized customer discounts, ameliorating customer experience, customer retention, predicting future demand and supply, and level up the stocks, inventory, and warehouses with necessary resources.
* This can lead to successes but one has to learn from the failures in this learning process. Business and Statistics go hand-in -hand together in predictive analytics. One has to be aware of proper business acumen, better perspective towards the business, and customer to deploy analytics successfully. There might be more factors to consider but for this I have chosen the above.
* With proper care, companies can strengthen their relationships with customers and other stakeholders to make better data-driven decisions.

**References:**

1. **Top 5 Predictive Analytics to boost your ROI: Use cases In Retail Marketing by: Team EA**, <https://expressanalytics.com/blog/top-5-predictive-analytics-use-case-in-retail/>
2. **A Guide to Predictive Analytics in Retail by Keara Dowd**, <https://biztechmagazine.com/article/2020/03/guide-predictive-analytics-retail-perfcon>
3. **Predictive Analytics in the Retail Industry by Garima Jain**, <https://blogs.mastechinfotrellis.com/predictive-analytics-in-the-retail-industry>

* Insurance companies requires strong security and regulations to make their customers data more secure, safe, and hassle-free
* Insurance exists to protect the customer from a potential loss, and to predict the likelihood of that loss, or claim, occurring
* Predictive modelling and data analytics can also help in the timely detection of insurance fraud and false claims
* Identifying, attracting and retaining high-quality policyholders is a challenge that insurers across the industry face
* Real time analytics and data prefill tools will help create a memorable experience for customers
* Insurance products can be tailored to suit the needs of the customer, improving customer satisfaction and loyalty

Tools used in Retail industry are:

* RapidMiner Studio
* Alteryx
* Dataiku
* Microsoft Azure
* NTT Analytics
* Teradata
* Qlikview
* Sisense
* Knime AG
* Kognito

Predictive Analytics is a tremendous aid to the retail business as it encourages them to comprehend and identify with their clients' needs and needs. Retail food merchants can use Predictive Analytics to numerous more zones of their operations, both clients facing and at the back-end. Retailers are adjusting analytics to pick up insights into their clients. These insights are being utilized to create a new type of retail: one that is effective, shrewd, and helpful towards empowering brand dependability and better client experience.

Predictive analytics is the process of learning from historical data in order to make predictions about the future (or any unknown). For health care, predictive analytics will enable the best decisions to be made, allowing for care to be personalized to each individual. Big data and algorithm production have reignited interest and excitement around predictive analytics. There has been an explosion of health care data—with new technologies to sequence our DNA, collect continuous monitoring data and patient-reported social media data, the amount of healthcare data is expected to grow to 25,000 petabytes in 2020.

**Reference:**

1. The Future of Personalized Healthcare: Predictive Analytics by Malay Gandhi and Teresa Wang, https://rockhealth.com/reports/predictive-analytics/